



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004

TIME: 11:10:50

Input Set : A:\407T-911270US.txt  
 Output Set: N:\CRF4\08232004\J649378A.raw

3 <110> APPLICANT: FOGELMAN, ALAN M.  
 4 ANANTHARAMAIAH, GATTADAHALLI M.  
 5 NAVAB, MOHAMAD  
 7 <120> TITLE OF INVENTION: ORALLY ADMINISTERED SMALL PEPTIDES SYNERGIZE STATIN ACTIVITY  
 9 <130> FILE REFERENCE: 407T-911270US  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/649,378A  
 12 <141> CURRENT FILING DATE: 2003-08-26  
 14 <150> PRIOR APPLICATION NUMBER: US10/423,830  
 15 <151> PRIOR FILING DATE: 2003-04-25  
 17 <150> PRIOR APPLICATION NUMBER: US10/273,386  
 18 <151> PRIOR FILING DATE: 2002-10-16  
 20 <150> PRIOR APPLICATION NUMBER: US10/187,215  
 21 <151> PRIOR FILING DATE: 2002-06-28  
 23 <150> PRIOR APPLICATION NUMBER: US09/896,841  
 24 <151> PRIOR FILING DATE: 2001-06-29  
 26 <150> PRIOR APPLICATION NUMBER: US09/645,454  
 27 <151> PRIOR FILING DATE: 2000-08-24  
 29 <150> PRIOR APPLICATION NUMBER: US60/494,449  
 30 <151> PRIOR FILING DATE: 2003-08-11  
 32 <160> NUMBER OF SEQ ID NOS: 464  
 34 <170> SOFTWARE: PatentIn version 3.3  
 36 <210> SEQ ID NO: 1  
 37 <211> LENGTH: 18  
 38 <212> TYPE: PRT  
 39 <213> ORGANISM: Artificial Sequence  
 41 <220> FEATURE:  
 42 <223> OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected

(PS.6-7)  
**ENTERED**

43 unprotected D or L form.  
 46 <220> FEATURE:  
 47 <221> NAME/KEY: misc\_feature  
 48 <222> LOCATION: (1)..(1)  
 49 <223> OTHER INFORMATION: Xaa is aspartic acid or glutamic acid.  
 51 <220> FEATURE:  
 52 <221> NAME/KEY: misc\_feature  
 53 <222> LOCATION: (2)..(3)  
 54 <223> OTHER INFORMATION: Xaa is tryptophan, phenylalanine, alanine, leucine, tyrosine, isoleucine, valine or alpha-naphthylalanine.  
 57 <220> FEATURE:  
 58 <221> NAME/KEY: misc\_feature  
 59 <222> LOCATION: (4)..(4)  
 60 <223> OTHER INFORMATION: Xaa is lysine, or arginine.  
 62 <220> FEATURE:  
 63 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004

TIME: 11:10:50

Input Set : A:\407T-911270US.txt

Output Set: N:\CRF4\08232004\J649378A.raw

64 <222> LOCATION: (5)..(5)  
 65 <223> OTHER INFORMATION: Xaa is serine, threonine, alanine, glycine, or histidine,.  
 67 <220> FEATURE:  
 68 <221> NAME/KEY: misc\_feature  
 69 <222> LOCATION: (6)..(7)  
 70 <223> OTHER INFORMATION: Xaa is tryptophan, phenylalanine, alanine, leucine, tyrosine,  
 71 isoleucine, valine or alpha-naphthylalanine.  
 73 <220> FEATURE:  
 74 <221> NAME/KEY: misc\_feature  
 75 <222> LOCATION: (8)..(8)  
 76 <223> OTHER INFORMATION: Xaa is aspartic acid or glutamic acid.  
 78 <220> FEATURE:  
 79 <221> NAME/KEY: misc\_feature  
 80 <222> LOCATION: (9)..(9)  
 81 <223> OTHER INFORMATION: Xaa is lysine or arginine  
 83 <220> FEATURE:  
 84 <221> NAME/KEY: misc\_feature  
 85 <222> LOCATION: (10)..(11)  
 86 <223> OTHER INFORMATION: Xaa is tryptophan, phenylalanine, alanine, leucine, tyrosine,  
 87 isoleucine, valine or alpha-naphthylalanine.  
 89 <220> FEATURE:  
 90 <221> NAME/KEY: misc\_feature  
 91 <222> LOCATION: (12)..(12)  
 92 <223> OTHER INFORMATION: Xaa is aspartic acid or glutamic acid.  
 94 <220> FEATURE:  
 95 <221> NAME/KEY: misc\_feature  
 96 <222> LOCATION: (13)..(13)  
 97 <223> OTHER INFORMATION: Xaa is lysine or arginine  
 99 <220> FEATURE:  
 100 <221> NAME/KEY: misc\_feature  
 101 <222> LOCATION: (14)..(14)  
 102 <223> OTHER INFORMATION: Xaa is tryptophan, phenylalanine, alanine, leucine,  
 tyrosine,  
 103 isoleucine, valine or alpha-naphthylalanine.  
 105 <220> FEATURE:  
 106 <221> NAME/KEY: misc\_feature  
 107 <222> LOCATION: (15)..(15)  
 108 <223> OTHER INFORMATION: Xaa is lysine or arginine  
 110 <220> FEATURE:  
 111 <221> NAME/KEY: misc\_feature  
 112 <222> LOCATION: (16)..(16)  
 113 <223> OTHER INFORMATION: Xaa is aspartic acid or glutamic acid.  
 115 <220> FEATURE:  
 116 <221> NAME/KEY: misc\_feature  
 117 <222> LOCATION: (17)..(18)  
 118 <223> OTHER INFORMATION: Xaa is tryptophan, phenylalanine, alanine, leucine,  
 tyrosine,  
 119 isoleucine, valine or alpha-naphthylalanine.  
 121 <400> SEQUENCE: 1

W--&gt; 123 Xaa Xaa

124 1

5

10

15

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004

TIME: 11:10:50

Input Set : A:\407T-911270US.txt

Output Set: N:\CRF4\08232004\J649378A.raw

W--&gt; 127 Xaa Xaa

131 <210> SEQ ID NO: 2  
132 <211> LENGTH: 20  
133 <212> TYPE: PRT  
134 <213> ORGANISM: Artificial Sequence  
136 <220> FEATURE:  
137 <223> OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected  
or  
138       unprotected D or L form.  
141 <220> FEATURE:  
142 <221> NAME/KEY: misc\_feature  
143 <222> LOCATION: (1)..(1)  
144 <223> OTHER INFORMATION: Xaa is Pro, Ala, Gly, Asn, Gln, or D-Pro  
146 <220> FEATURE:  
147 <221> NAME/KEY: misc\_feature  
148 <222> LOCATION: (2)..(2)  
149 <223> OTHER INFORMATION: Xaa is is an aliphatic amino acid  
151 <220> FEATURE:  
152 <221> NAME/KEY: misc\_feature  
153 <222> LOCATION: (3)..(3)  
154 <223> OTHER INFORMATION: Xaa is Leu  
156 <220> FEATURE:  
157 <221> NAME/KEY: misc\_feature  
158 <222> LOCATION: (4)..(4)  
159 <223> OTHER INFORMATION: Xaa is an acidic amino acid  
161 <220> FEATURE:  
162 <221> NAME/KEY: misc\_feature  
163 <222> LOCATION: (5)..(6)  
164 <223> OTHER INFORMATION: Xaa is Leu, or Phe  
166 <220> FEATURE:  
167 <221> NAME/KEY: misc\_feature  
168 <222> LOCATION: (7)..(7)  
169 <223> OTHER INFORMATION: Xaa is a basic amino acid  
171 <220> FEATURE:  
172 <221> NAME/KEY: misc\_feature  
173 <222> LOCATION: (8)..(8)  
174 <223> OTHER INFORMATION: Xaa is an acidic amino acid  
176 <220> FEATURE:  
177 <221> NAME/KEY: misc\_feature  
178 <222> LOCATION: (9)..(10)  
179 <223> OTHER INFORMATION: Xaa is Leu, or Trp  
181 <220> FEATURE:  
182 <221> NAME/KEY: misc\_feature  
183 <222> LOCATION: (11)..(11)  
184 <223> OTHER INFORMATION: Xaa is an acidic amino acid or Asn  
186 <220> FEATURE:  
187 <221> NAME/KEY: misc\_feature  
188 <222> LOCATION: (12)..(12)  
189 <223> OTHER INFORMATION: Xaa is an acidic amino acid  
191 <220> FEATURE:

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004

TIME: 11:10:50

Input Set : A:\407T-911270US.txt  
 Output Set: N:\CRF4\08232004\J649378A.raw

```

192 <221> NAME/KEY: misc_feature
193 <222> LOCATION: (13)..(13)
194 <223> OTHER INFORMATION: Xaa is Leu, Trp, or Phe
196 <220> FEATURE:
197 <221> NAME/KEY: misc_feature
198 <222> LOCATION: (14)..(14)
199 <223> OTHER INFORMATION: Xaa is a basic amino acid or Leu
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <222> LOCATION: (15)..(15)
204 <223> OTHER INFORMATION: Xaa is Gln, or Asn
206 <220> FEATURE:
207 <221> NAME/KEY: misc_feature
208 <222> LOCATION: (16)..(16)
209 <223> OTHER INFORMATION: Xaa is a basic amino acid
211 <220> FEATURE:
212 <221> NAME/KEY: misc_feature
213 <222> LOCATION: (17)..(17)
214 <223> OTHER INFORMATION: Xaa is Leu
216 <220> FEATURE:
217 <221> NAME/KEY: misc_feature
218 <222> LOCATION: (18)..(18)
219 <223> OTHER INFORMATION: Xaa is a basic amino acid
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (19)..(20)
224 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
226 <400> SEQUENCE: 2
W--> 228 Xaa Xaa
229 1 5 10 15
W--> 232 Xaa Xaa Xaa Xaa
233 20
236 <210> SEQ ID NO: 3
237 <211> LENGTH: 18
238 <212> TYPE: PRT
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected
or
243 unprotected D or L form.
245 <400> SEQUENCE: 3
247 Asp Trp Leu Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu Lys Glu
248 1 5 10 15
251 Ala Phe
255 <210> SEQ ID NO: 4
256 <211> LENGTH: 18
257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected
or

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004

TIME: 11:10:50

Input Set : A:\407T-911270US.txt

Output Set: N:\CRF4\08232004\J649378A.raw

262       unprotected D or L form.

264 &lt;400&gt; SEQUENCE: 4

266 Asp Trp Leu Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu Lys Glu  
267 1               5                   10                   15

270 Ala Phe

274 &lt;210&gt; SEQ ID NO: 5

275 &lt;211&gt; LENGTH: 18

276 &lt;212&gt; TYPE: PRT

277 &lt;213&gt; ORGANISM: Artificial Sequence

279 &lt;220&gt; FEATURE:

280 &lt;223&gt; OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected

or

281       unprotected D or L form.

283 &lt;400&gt; SEQUENCE: 5

285 Asp Trp Leu Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu Lys Glu  
286 1               5                   10                   15

289 Ala Phe

293 &lt;210&gt; SEQ ID NO: 6

294 &lt;211&gt; LENGTH: 18

295 &lt;212&gt; TYPE: PRT

296 &lt;213&gt; ORGANISM: Artificial Sequence

298 &lt;220&gt; FEATURE:

299 &lt;223&gt; OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected

or

300       unprotected D or L form.

302 &lt;400&gt; SEQUENCE: 6

304 Asp Trp Phe Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu Lys Glu  
305 1               5                   10                   15

308 Ala Phe

312 &lt;210&gt; SEQ ID NO: 7

313 &lt;211&gt; LENGTH: 18

314 &lt;212&gt; TYPE: PRT

315 &lt;213&gt; ORGANISM: Artificial Sequence

317 &lt;220&gt; FEATURE:

318 &lt;223&gt; OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected

or

319       unprotected D or L form.

321 &lt;400&gt; SEQUENCE: 7

323 Asp Trp Leu Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Phe Lys Glu  
324 1               5                   10                   15

327 Ala Phe

331 &lt;210&gt; SEQ ID NO: 8

332 &lt;211&gt; LENGTH: 18

333 &lt;212&gt; TYPE: PRT

334 &lt;213&gt; ORGANISM: Artificial Sequence

336 &lt;220&gt; FEATURE:

337 &lt;223&gt; OTHER INFORMATION: Chemically synthesized peptide. Amino acids can be protected

or

338       unprotected D or L form.

340 &lt;400&gt; SEQUENCE: 8

342 Asp Trp Phe Lys Ala Phe Tyr Asp Lys Val Ala Glu Lys Phe Lys Glu  
343 1               5                   10                   15

346 Ala Phe

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004  
TIME: 11:10:51

Input Set : A:\407T-911270US.txt  
Output Set: N:\CRF4\08232004\J649378A.raw

Please Note:

One or more n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

q#:1; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18  
q#:2; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20  
q#:143; Xaa Pos. 1  
q#:149; Xaa Pos. 1  
q#:150; Xaa Pos. 1  
q#:151; Xaa Pos. 1  
q#:171; Xaa Pos. 1  
q#:172; Xaa Pos. 1  
q#:173; Xaa Pos. 1  
q#:174; Xaa Pos. 1  
q#:175; Xaa Pos. 1  
q#:193; Xaa Pos. 3  
q#:194; Xaa Pos. 3  
q#:195; Xaa Pos. 3  
q#:205; Xaa Pos. 1  
q#:206; Xaa Pos. 1  
q#:209; Xaa Pos. 3  
q#:226; Xaa Pos. 1  
q#:229; Xaa Pos. 3  
q#:244; Xaa Pos. 4  
q#:245; Xaa Pos. 4  
q#:252; Xaa Pos. 4  
q#:253; Xaa Pos. 4  
q#:282; Xaa Pos. 1  
q#:288; Xaa Pos. 1  
q#:289; Xaa Pos. 1  
q#:290; Xaa Pos. 1  
q#:291; Xaa Pos. 1  
q#:319; Xaa Pos. 1  
q#:320; Xaa Pos. 1  
q#:321; Xaa Pos. 1  
q#:322; Xaa Pos. 1  
q#:323; Xaa Pos. 1  
q#:324; Xaa Pos. 1  
q#:325; Xaa Pos. 1  
q#:326; Xaa Pos. 1  
q#:349; Xaa Pos. 4  
q#:350; Xaa Pos. 4  
q#:359; Xaa Pos. 4  
q#:360; Xaa Pos. 4  
q#:361; Xaa Pos. 4  
q#:362; Xaa Pos. 4  
q#:371; Xaa Pos. 4  
q#:372; Xaa Pos. 4

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/23/2004  
PATENT APPLICATION: US/10/649,378A TIME: 11:10:51

Input Set : A:\407T-911270US.txt  
Output Set: N:\CRF4\08232004\J649378A.raw

g#:373; Xaa Pos. 4

valid <213> Response:

of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

#: 17, 20, 21, 22, 23, 25, 27, 32, 34, 56, 76, 77, 82, 133, 134, 135, 136, 140, 142, 193, 195  
#: 196, 203, 269, 336, 418, 444, 445

## VERIFICATION SUMMARY

DATE: 08/23/2004

PATENT APPLICATION: US/10/649,378A

TIME: 11:10:51

Input Set : A:\407T-911270US.txt

Output Set: N:\CRF4\08232004\J649378A.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number  
 L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
 L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16  
 L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
 L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:16  
 L:2733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:143 after pos.:0  
 L:2829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:149 after pos.:0  
 L:2850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:150 after pos.:0  
 L:2871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:151 after pos.:0  
 L:3183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:171 after pos.:0  
 L:3204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:172 after pos.:0  
 L:3225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:173 after pos.:0  
 L:3246 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174 after pos.:0  
 L:3267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:175 after pos.:0  
 L:3543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:193 after pos.:0  
 L:3564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:194 after pos.:0  
 L:3585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:195 after pos.:0  
 L:3741 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:0  
 L:3762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:206 after pos.:0  
 L:3813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:209 after pos.:0  
 L:4074 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:226 after pos.:0  
 L:4125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:229 after pos.:0  
 L:4356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:244 after pos.:0  
 L:4377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:0  
 L:4488 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:252 after pos.:0  
 L:4509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:253 after pos.:0  
 L:4950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:282 after pos.:0  
 L:5046 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:0  
 L:5067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:289 after pos.:0  
 L:5088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:0  
 L:5109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:291 after pos.:0  
 L:5535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:319 after pos.:0  
 L:5556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:320 after pos.:0  
 L:5577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:321 after pos.:0  
 L:5598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:322 after pos.:0  
 L:5619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:323 after pos.:0  
 L:5640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:324 after pos.:0  
 L:5661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:325 after pos.:0  
 L:5682 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:326 after pos.:0  
 L:6033 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:349 after pos.:0  
 L:6054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:350 after pos.:0  
 L:6195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:359 after pos.:0  
 L:6216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:360 after pos.:0  
 L:6237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:361 after pos.:0  
 L:6258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:362 after pos.:0  
 L:6399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:371 after pos.:0  
 L:6420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:372 after pos.:0  
 L:6441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:373 after pos.:0

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/649,378A

DATE: 08/23/2004

TIME: 11:10:51

Input Set : **A:\407T-911270US.txt**

Output Set: **N:\CRF4\08232004\J649378A.raw**

L:6462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:374 after pos.:0